

Table 1

FEDERATION OF SOCIETIES FOR MICROBIOLOGY

Strain No.	Genus	Supernatant fraction		Cell fraction	
		FOH	GGOH	FOH	GGOH
ATCC 12341	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	14.4
K 4010	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	9.1
K 4031	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	7.0
K 4037	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	5.8
K 4039	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	5.5
K 4041	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	8.4
IFO 0565	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	54.7
IFO 0222	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	3.3
IFO 0216	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	5.8
ATCC 9080	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	5.7
IFO 0106	<i>Saccharomycopsis fibuligera</i>	0.0	0.0	0.0	3.4
IFO 0125	<i>Williopsis saturnus</i> var. saturans	0.0	0.0	0.0	5.4
IFO 0807	<i>Pichia silvicola</i>	0.0	0.0	0.0	1.2
IFO 0980	<i>Nakazawaea holstii</i>	0.0	0.0	0.0	5.2
K 4327	<i>Hansenula polymorpha</i>	0.0	0.0	0.0	4.7
IFO 0151	<i>Kloeckera japonica</i>	0.0	0.0	0.0	10.2
IFO 0128	<i>Pichia membranaefaciens</i>	0.0	0.0	0.0	11.0
K 4261	<i>Pichia aganobii</i>	0.0	4.0	0.0	0.0
IFO 0941	<i>Williopsis saturnus</i> var. saturans	0.0	0.0	0.0	6.7
IFO 0013	<i>Candida krusei</i>	0.0	0.0	0.0	16.5
IFO 0706	<i>Candida kefyr</i>	0.0	0.0	0.0	4.9
IFO 0716	<i>Candida tenuis</i>	0.0	0.0	0.0	8.7
IFO 0617	<i>Kluyveromyces marxianus</i>	0.0	0.0	0.0	25.2
IFO 0762	<i>Candida solani</i>	0.0	0.0	0.0	29.0
IFO 1060	<i>Candida albicans</i>	0.0	2.4	0.0	0.0
IFO 0720	<i>Candida catenulata</i>	0.0	0.0	0.0	25.9

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 2

Strain No.	Genus	Supernatant fraction		Cell fraction	
		FOH	GGOH	FOH	GGOH
K 4002	Saccharomyces sp.	4.4	0.0	0.0	10.9
K 4006	Saccharomyces sp.	4.2	0.0	4.3	6.7
K 4013	Saccharomyces sake	0.0	0.0	7.3	5.0
K 4015	Saccharomyces sake	7.9	0.0	6.6	7.9
K 4016	Saccharomyces sake	4.5	0.0	2.2	6.5
K 4017	Saccharomyces sake	4.3	0.0	7.9	7.9
K 4018	Saccharomyces sake	4.4	0.0	5.0	9.9
K 4020	Saccharomyces sake	0.0	0.0	2.8	5.4
K 4022	Saccharomyces sake	0.0	0.0	2.1	4.7
K 4023	Saccharomyces sake	0.0	0.0	5.2	11.5
K 4025	Saccharomyces sake	5.0	0.0	5.5	2.0
K 4026	Saccharomyces sake	0.0	0.0	2.6	7.6
K 4029	Saccharomyces sake	0.0	0.0	2.2	2.3
K 4030	Saccharomyces sp.	5.1	0.0	4.6	3.7
K 4036	Saccharomyces sp.	0.0	0.0	4.1	15.2
K 4045	Saccharomyces cerevisiae	0.0	0.0	44.9	18.6
K 4102	Saccharomyces ellipsoideus	0.0	0.0	22.9	7.2
K 4103	Saccharomyces cerevisiae	0.0	0.0	22.6	8.6
K 4104	Saccharomyces cerevisiae	0.0	0.0	15.8	31.7
IFO 0252	Saccharomyces rosei	0.0	0.0	28.5	39.0
IFO 0288	Kluyveromyces marxianus	0.0	0.0	11.3	22.6
Kyokai No. 2	Saccharomyces sake	0.0	0.0	9.7	26.1
IFO 0422	Torulaspora delbrueckii	0.0	0.0	8.2	11.9
IFO 0487	Zygosaccharomyces rouxii	0.0	0.0	4.9	14.3
IFO 1346	Saccharomyces cerevisiae	0.0	0.0	4.3	13.1
ATCC 204660	Saccharomyces cerevisiae	8.7	0.0	9.3	26.8
IFO 0339	Saccharomyces ludwigii	15.3	0.0	6.0	80.9
IAM 4842	Schizosaccharomyces octosporus	2.7	0.0	2.2	12.1
IFO 1116	Wickerhamia fluorescens	18.7	0.0	4.2	23.0
IFO 0794	Debaryomyces hansenii var. fabryi	4.8	2.7	7.7	11.5
IFO 1359	Debaryomyces castellii	18.5	0.0	6.3	21.1

(Continuation of Table 2)

JCM 2169	<i>Debaromyces vanrijiae</i>	73.7	0.0	14.3	6.2
	var <i>vanrijiae</i>				
IFO 0115	<i>Hanseniaspora valbyensis</i>	13.6	0.0	7.4	103.5
IFO 0118	<i>Pichia anomala</i>	0.0	0.0	2.2	15.3
IFO 0569	<i>Pichia anomala</i>	0.0	0.0	7.3	28.2
IFO 0941	<i>Williopsis saturnus</i>	4.7	0.0	69.8	78.7
	var. <i>saturnus</i>				
IFO 1475	<i>Ogataea polymorpha</i>	0.0	0.0	13.5	36.1
IFO 1670	<i>Pichia naganishii</i>	1.2	2.1	0.0	0.0
IFO 0707	<i>Pichia anomala</i>	8.6	0.6	0.0	12.3
IFO 0719	<i>Candida zeylanoides</i>	10.2	0.0	4.4	20.3
IFO 0701	<i>Candida stellata</i>	10.3	0.0	0.0	4.9
IFO 0662	<i>Kluyveromyces thermotolerans</i>	13.7	0.0	10.4	9.2
IFO 0648	<i>Kluyveromyces lactis</i>	16.0	0.0	6.3	72.9
IFO 0005	<i>Candida glabrata</i>	35.7	5.4	4.5	28.3
IFO 0595	<i>Zygosaccharomyces japonicus</i>	9.3	3.6	0.0	0.0

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 3

Strains		Supernatant fraction		Cell fraction	
Strain No.	Genus	FOH	GGOH	FOH	GGOH
K 4003	Saccharomyces sp.	5.0	0.0	19.3	0.0
K 4004	Saccharomyces sp.	10.6	0.0	15.2	0.0
K 4011	Saccharomyces sake	0.0	0.0	9.0	0.0
K 4021	Saccharomyces sake	0.0	0.0	2.2	0.0
K 4101	Saccharomyces logos	0.0	0.0	18.4	0.0
IFO 0686	Zygosaccharomyces rouxii	0.0	0.0	10.1	0.0
IFO 0285	Saccharomyces dairensis	4.4	0.0	0.0	0.0
IFO 0262	Saccharomyces cerevisiae	7.1	0.0	0.0	0.0
IFO 0021	Zygosaccharomyces fermentati	5.4	0.0	0.0	0.0
IFO 0259	Saccharomyces paradoxus	3.2	0.0	0.0	0.0
IFO 0539	Saccharomyces bayanus	1.4	0.0	0.0	0.0
IFO 0613	Saccharomyces bayanus	2.3	0.0	0.0	0.0
IFO 0346	Schizosaccharomyces pombe	4.4	0.0	16.8	0.0
IFO 0358	Schizosaccharomyces pombe	2.3	0.0	4.7	0.0
IFO 0023	Debaryomyces hansenii	12.2	0.0	0.0	0.0
IFO 0954	Citeromyces matritensis	8.5	0.0	0.0	0.0
IFO 0974	Kuraishia capsulata	0.0	0.0	8.2	0.0
IFO 0963	Pichia anomala	0.0	0.0	9.6	0.0
IFO 0673	Waltomyces lipofer	10.1	0.0	0.0	0.0
IFO 0678	Lypomyces starkeyi	4.8	0.0	0.0	0.0
IFO 0579	Candida albicans	12.8	0.0	0.0	0.0
IFO 0626	Candida utilis	3.0	0.0	0.0	0.0
IFO 3022	Bacillus amyloliquefaciens	4.1	0.0	0.0	0.0
IFO 3030	Bacillus pumilus	6.0	0.0	0.0	0.0
IFO 3762	Staphylococcus epidermidis	6.1	0.0	0.0	0.0
K 876	Pseudomonas sp.	18.6	0.0	0.0	0.0

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 4

Strain No.	Genus	Supernatant fraction ($\mu\text{g/L}$ of culture solution)			Cell fraction		
		NE	FOH	GGOH	NE	FOH	GGOH
IFO 12865	<i>Streptomyces gardneri</i>	0.0	0.0	0.0	11.5	0.0	0.0
IFO 3384	<i>Nocardia asteroides</i>	0.0	0.0	0.0	14.2	0.0	0.0
IFO 14340	<i>Nocardia fusca</i>	0.0	0.0	0.0	6.4	0.0	0.0

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

Table 5

Strain No.	Medium composition	Cultivation period (days)	Supernatant fraction ($\mu\text{g/L}$ of culture solution)			
			Phosphatase-untreated		Phosphatase-treated	
			FOH	GGOH	FOH	GGOH
IFO 0005	YM	1	0.0	0.0	1.5	0.0
		2	0.0	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	YM+Glc	1	0.0	0.0	6.1	0.0
		2	0.0	0.0	9.5	0.0
		3	29.4	2.3	13.9	0.0
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	135.6	92.0	69.9	31.5
		3	850.7	416.5	116.6	40.0
IFO 0115	YM	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	0.0	0.0
		3	34.0	0.0	0.0	0.0
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	11.3	0.0	0.0	0.0
		3	36.4	0.0	18.0	0.0
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	24.0	0.0	5.1	0.0
		3	30.3	26.5	7.9	0.0
IFO 0339	YM	1	0.0	0.0	0.0	0.0
		2	8.7	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	16.8	0.0	17.7	0.0
		3	67.1	0.0	20.8	0.0
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	11.7	5.3	0.0	0.0
		3	85.6	7.3	6.5	0.0

FOH: farnesol

GGOH: geranylgeraniol

YM: YM medium (Difco)

YM+Glc: YM medium (Difco) + 5% glucose

YM+Glc+SBO: YM medium (Difco) + 5% glucose + 1% soybean oil

Table 6

Strain No.	Medium composition	Cultivation period (days)	Cell fraction ($\mu\text{g/L}$ of culture solution)			
			Phosphatase-untreated		Phosphatase-treated	
			FOH	GGOH	FOH	GGOH
IFO 0005	YM	1	39.4	0.0	0.0	0.0
		2	14.8	37.3	0.0	0.0
		3	11.4	41.7	51.2	0.0
	YM+Glc	1	8.4	0.0	0.0	0.0
		2	44.1	134.4	86.8	304.8
		3	104.4	323.9	202.4	772.6
	YM+Glc+SBO	1	5.8	0.0	0.0	0.0
		2	427.4	178.9	248.0	239.6
		3	835.3	363.7	1321.6	1176.2
IFO 0115	YM	1	0.0	0.0	0.0	0.0
		2	34.0	5.1	0.0	0.0
		3	21.1	45.6	0.0	63.7
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	46.6	26.1	23.9	0.0
		3	54.2	108.5	78.0	491.8
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	9.7	0.0
		3	61.3	122.0	69.2	286.1
IFO 0339	YM	1	18.0	0.0	0.0	0.0
		2	16.6	0.0	0.0	0.0
		3	19.5	48.3	0.0	71.0
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	58.6	34.1	12.0	0.0
		3	62.3	173.8	67.8	464.8
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	96.4	10.3	9.3	0.0
		3	61.6	103.7	27.9	135.6

FOH: farnesol

GGOH: geranylgeraniol

YM: YM medium (Difco)

YM+Glc: YM medium (Difco) + 5% glucose

YM+Glc+SBO: YM medium (Difco) + 5% glucose + 1% soybean oil

Table 7

Medium composition: YM medium (Difco)

Strain No.	Genus	Strains			Supernatant fraction (ug/L of culture solution)		Cell fraction (ug/L of culture solution)
		FOH	GGOH	FOH	GGOH		
K 4104	Saccharomyces cerevisiae	0.0	0.0	15.8	31.7		
IFO 0252	Saccharomyces rosei	0.0	0.0	28.5	39.0		
IFO 0565	Saccharomyces cerevisiae	0.0	0.0	0.0	54.7		
IFO 0941	Williopsis saturnus var. saturnus	4.7	0.0	69.8	78.7		
IFO 1475	Ogataea polymorpha	0.0	0.0	13.5	36.1		
IFO 0648	Kluyveromyces lactis	6.0	0.0	6.3	72.9		

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeranoid

Table 8

Medium composition: YM medium (Difco) + 5% glucose + 1% soybean oil

Strain No.	Genus		F OH	G GOH	F OH	G GOH
		Strains	Cultivation days	Supernatant fraction (μg/L of culture solution)		
K 4104	Saccharomyces cerevisiae	3	281.0	127.7	241.1	161.6
		6	338.2	186.9	155.3	132.2
IFO 2052	Saccharomyces rosei	3	220.0	98.0	305.9	140.2
		6	381.2	176.6	193.1	122.5
IFO 0565	Saccharomyces cerevisiae	3	49.3	16.0	88.0	78.2
		6	51.9	34.1	248.5	214.2
IFO 0941	Williopsis saturnus	3	54.8	22.6	255.3	169.3
	var. saturnus	6	88.3	33.1	363.2	220.9
IFO 1475	Ogataea polymorpha	3	60.9	69.1	113.5	127.2
		6	19.8	14.4	60.8	95.9
IFO 0648	Kluyveromyces lactis	3	28.5	37.8	61.8	91.1
		6	120.3	124.5	159.8	211.5

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 9

Medium composition: YM medium (Difco) + 4 mg/L ergosterol + 0-20 mg/L SQAD

Strain No.	SQAD	Days	Supernatant fraction (μ g/L of culture solution)			Cell fraction		
			NE	FOH	GGOH	NE	FOH	GGOH
IFO 0215	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Saccharomyces	1		0.0	0.0	0.0	0.0	0.0	0.0
<i>unisporus</i>	20		0.0	3.2	0.0	0.0	0.0	0.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 0538	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Saccharomyces	1		0.0	0.0	0.0	0.0	0.0	0.0
<i>cerevisiae</i>	20		0.0	0.0	0.0	0.0	8.1	0.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 0622	0	3	0.0	3.1	0.0	0.0	1.9	30.4
Candida	1		0.0	3.5	0.0	0.0	1.4	24.3
<i>glabrata</i>	20		0.0	243.5	0.0	0.0	212.0	57.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	5.5	40.5
IFO 0717	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Yarrowia	1		0.0	1.3	0.0	0.0	0.0	0.0
<i>lopolytica</i>	20		0.0	39.7	66.5	0.0	39.7	63.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	2.1	0.0	0.0	1.5	0.0
	20		0.0	10.6	0.0	0.0	10.6	0.0
IFO 0948	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Komagataella	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	3.4	2.3	0.0	3.4	1.8
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0

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Table 9 (continued)

(Continuation of Table 9)

IFO 0974	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Kuraishia	1		0.0	0.0	0.0	0.0	0.0	0.0
capsulata	20		0.0	0.0	0.0	0.0	0.0	0.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 1472	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Ogataea	1		0.0	0.0	0.0	0.0	0.0	0.0
glucozyma	20		0.0	0.0	18.3	0.0	0.0	17.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	6.8
IFO 1892	0	3	0.0	0.0	0.0	0.0	0.0	8.9
Saccharomyces	1		0.0	0.0	0.0	0.0	0.0	16.7
kluyeri	20		0.0	0.0	0.0	0.0	0.0	38.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 1910	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Candida	1		0.0	0.0	0.0	0.0	0.0	0.0
cariosilignicola	20		0.0	0.0	0.0	0.0	0.0	5.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 0005	0	3	0.0	0.0	0.0	0.0	0.0	12.0
Candida	1		0.0	0.0	0.0	0.0	0.0	4.3
glabrata	20		0.0	33.8	2.7	0.0	0.0	53.7
	0	7	0.0	0.0	0.0	0.0	20.5	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0

I: strain purchased from IFO

NE: nerolidol FOH: farnesol GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 1: 1 mg/L 20: 20 mg/L

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Table 10

Medium composition: YM medium (Difco) + 5% glucose + 1% soybean oil
+ 4 mg/L ergosterol + 0-20 mg/L SQAD

Strain No.	SQAD	Days	NE	Supernatant fraction		Cell fraction		
				FOH	GGOH	NE	FOH	GGOH
IFO 0215	0	3	16.3	8.2	0.0	0.0	0.0	0.0
<i>Saccharomyces</i>	1		12.2	5.2	0.0	0.0	0.0	0.0
<i>unisporus</i>	20		67.4	68.4	0.0	0.0	16.9	0.0
	0	7	19.6	14.8	0.0	0.0	0.0	0.0
	1		27.3	17.5	0.0	0.0	0.0	0.0
	20		466.6	433.7	21.6	8.6	255.6	0.0
IFO 0538	0	3	0.0	139.3	59.8	0.0	0.0	0.0
<i>Saccharomyces</i>	1		0.0	102.9	46.2	0.0	15.5	0.0
<i>cerevisiae</i>	20		65.9	9087.5	331.6	0.0	1465.9	51.0
	0	7	0.0	426.4	246.7	0.0	38.0	0.0
	1		0.0	319.5	241.0	0.0	188.8	85.6
	20		216.2	34241.4	1568.8	18.4	5812.1	266.2
IFO 0622	0	3	0.0	106.1	112.3	0.0	28.8	33.6
<i>Candida</i>	1		9.4	149.2	119.7	0.0	9.7	0.0
<i>glabrata</i>	20		422.2	12186.9	327.2	0.0	331.6	9.3
	0	7	11.6	378.3	408.5	0.0	43.7	59.2
	1		17.2	530.0	231.5	0.0	133.3	58.5
	20		1256.9	22147.1	862.7	138.0	2750.6	170.5
IFO 0717	0	3	0.0	8.7	0.0	0.0	6.7	0.0
<i>Yarrowia</i>	1		2.4	100.1	19.1	0.0	165.3	0.0
<i>lopolytica</i>	20		19.0	983.3	17.8	0.0	882.1	0.0
	0	7	0.0	95.3	608.0	0.0	0.0	38.4
	1		19.0	405.4	546.8	0.0	0.0	0.0
	20		156.7	6812.9	76.2	0.0	1025.1	41.8
IFO 0948	0	3	0.0	73.5	78.9	0.0	13.8	42.3
<i>Komagataella</i>	1		0.0	82.2	71.5	0.0	22.9	28.4
<i>pastoris</i>	20		17.2	2956.2	132.5	0.0	608.4	80.1
	0	7	0.0	101.6	83.5	0.0	4.3	11.0
	1		0.0	569.8	235.7	0.0	53.4	28.2
	20		34.2	5513.3	360.4	0.0	537.5	84.5

(Continuation of Table 10)

IFO 0974	0	3	0.0	24.8	11.1	0.0	3.3	0.0
Kuraishia	1		0.0	1061.9	46.1	0.0	16.1	7.5
capsulata	20		0.0	2022.7	262.0	0.0	149.2	34.8
	0	7	0.0	167.5	236.3	0.0	3.2	8.5
	1		0.0	713.7	275.7	0.0	24.8	21.2
	20		35.9	8268.5	680.4	0.0	362.1	59.7
IFO 1472	0	3	0.0	34.8	79.8	0.0	7.4	20.4
Ogataea	1		0.0	40.5	86.0	0.0	3.7	9.5
glucozyma	20		0.0	808.8	278.7	0.0	41.1	37.5
	0	7	0.0	63.2	138.8	0.0	0.0	0.0
	1		0.0	93.8	114.7	0.0	0.0	0.0
	20		0.0	1832.0	513.0	0.0	73.7	52.6
IFO 1892	0	3	0.0	70.4	46.1	0.0	3.7	0.0
Saccharomyces	1		0.0	51.4	23.0	0.0	2.3	0.0
kluyeri	20		0.0	62.9	30.7	0.0	16.5	0.0
	0	7	0.0	158.5	71.4	0.0	0.0	0.0
	1		23.5	188.3	101.7	0.0	5.0	0.0
	20		44.1	935.3	126.4	0.0	227.8	27.8
IFO 1910	0	3	0.0	11.0	44.7	0.0	0.0	0.0
Candida	1		0.0	20.9	69.3	0.0	0.0	0.0
cariosilignicola	20		0.0	124.9	127.1	0.0	8.1	19.6
	0	7	0.0	51.7	152.9	0.0	0.0	0.0
	1		0.0	257.7	367.3	0.0	10.3	37.4
	20		0.0	14378.1	2997.2	0.0	845.5	205.0
IFO 0005	0	3	22.9	552.1	496.1	0.0	50.5	75.2
Candida	1		260.0	6784.9	818.5	8.6	462.0	86.5
glabrata	20		2384.0	37513.9	1022.9	423.9	9405.0	306.5
	0	7	77.1	1676.1	1434.6	0.0	41.2	51.2
	1		546.0	11219.5	1377.8	9.2	331.7	77.1
	20		6208.9	68495.6	3228.1	139.2	2682.5	217.6

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 1: 1 mg/L 20: 20 mg/L

Table 11

Medium composition: YM or KB or KY medium + 1% soybean oil + 6% glucose
+ 4 mg/L ergosterol

Medium	Strain No.	Supernatant fraction ($\mu\text{g/L}$)			
		SQAD	NE	FOH	GGOH
YM	IFO 0107	0	0.0	10.8	155.2
	<i>Saccharomyopsis fibuligera</i>	20	0.0	9.7	386.5
KB	K 0876	0	0.0	29.0	0.0
	<i>Pseudomonas sp.</i>	20	0.0	7.8	0.0
YM	IFO 1665	0	0.0	4.7	211.5
	<i>Saccharomyopsis fibuligera</i>	20	0.0	94.5	4214.9
YM	IFO 1744	0	0.0	0.0	155.5
	<i>Saccharomyopsis fibuligera</i>	20	0.0	41.1	3870.1
KB	K 2103	0	0.0	10.9	0.0
	<i>Norcadia asteroides</i>	20	0.0	0.0	0.0
KY	IFO 4570	0	0.0	0.0	36.5
	<i>Mucor Javanicus</i>	20	0.0	38.8	343.6
KY	K 4003	0	30.1	511.9	694.7
	<i>Saccharomyces Hafe logos van Laer</i>	20	4980.0	56541.1	3603.4
KY	K 4045	0	148.1	870.4	766.8
	<i>Saccharomyces cerevisiae</i>	20	24606.3	37772.7	2590.6
KY	K 4102	0	17.5	541.1	711.3
	<i>Saccharomyces ellipsoideus</i>	20	18160.8	50245.8	3207.1
KY	K 4103	0	56.4	753.1	1072.8
	<i>Saccharomyces cerevisiae</i>	20	20930.8	53814.6	4589.9
KY	K 4104	0	19.5	569.2	546.0
	<i>Saccharomyces cerevisiae</i>	20	23620.7	54713.2	2654.4
KY	IFO 0565	0	0.0	411.7	535.2
	<i>Saccharomyces cerevisiae</i>	20	839.9	45723.6	2216.6
KY	IFO 0210	0	37.5	685.5	362.8
	<i>Saccharomyces cerevisiae</i>	20	25251.0	48795.6	1627.2
KY	IFO 0346	0	0.0	196.2	278.9
	<i>Schizosaccharomyces pombe</i>	20	757.6	45282.1	1153.6
KY	IFO 1475	0	0.0	236.9	462.7
	<i>Ogataea polymorpha</i>	20	0.0	5643.0	1195.1

13022695 - 1222001

Table 11 (continued)

(Continuation of Table 11)

KY JCM 2169	0	0.0	809.8	241.2
Debaryomyces vanrijiae	20	129.5	20359.5	2236.0
var vanrijiae				
KY IFO 0339	0	0.0	164.4	364.3
Saccharomyces ludwigii	20	131.0	28498.6	1483.8
KY IFO 0115	0	0.0	254.9	493.6
Hanseniaspora valbyensis	20	182.6	26807.1	1217.7
Valbyensis				
KY IFO 0648	0	0.0	136.4	433.8
Kluyveromyces lactis	20	348.6	31785.7	3343.8
KY IFO 0005	0	192.8	861.5	909.0
Candida glabrata	20	15504.1	44573.8	2237.1
KY IFO 0762	0	37.0	274.7	384.4
Candida solani	20	1702.8	6574.7	619.1
KY IFO 1527	0	0.0	16.6	24.7
Cryptococcus humiculus	20	0.0	49.6	33.4
KY IFO 1116	0	0.0	199.3	315.7
Wickerhamia fluorescens	20	73.2	12200.1	1181.6

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 20: 20 mg/L

Treated with phosphatase

JOURNAL OF FERMENTATION AND BIOTECHNOLOGY

Table 12

Medium composition: YM or KB or KY medium + 1% soybean oil + 6% glucose
+ 4 mg/L ergosterol

Medium	Strain No.	Cell fraction ($\mu\text{g/L}$)			
		SQAD	NE	FOH	GGOH
YM	IFO 0107	0	0.0	8.1	24.6
	<i>Saccharomyopsis fibuligera</i>	20	0.0	4.8	79.9
KB	K 0876	0	0.0	0.0	0.0
	<i>Pseudomonas sp. H21</i>	20	0.0	0.0	0.0
YM	IFO 1665	0	0.0	8.2	21.7
	<i>Saccharomyopsis fibuligera</i>	20	0.0	20.8	228.9
YM	IFO 1744	0	0.0	0.0	42.2
	<i>Saccharomyopsis fibuligera</i>	0	0.0	29.8	819.1
KB	K 2103	0			
	<i>Norcadia asteroides</i>	20			
KY	IFO 4570	0	13.4	22.7	17.5
	<i>Mucor Javanicus</i>	20	0.0	15.6	61.7
KY	K 4003	0	0.0	36.9	52.4
	<i>Saccharomyces Hafe logos</i>	20	291.8	7433.0	710.6
	<i>van Laer</i>				
KY	K 4045	0	0.0	69.3	65.8
	<i>Saccharomyces cerevisiae</i>	20	3022.6	7893.0	534.5
KY	K 4102	0	0.0	36.4	76.3
	<i>Saccharomyces ellipsoideus</i>	20	1350.0	6358.2	396.5
KY	K 4103	0	0.0	591.7	39.4
	<i>Saccharomyces cerevisiae</i>	20	1073.6	5528.9	369.6
KY	K 4104	0	0.0	51.6	79.2
	<i>Saccharomyces cerevisiae</i>	20	2409.9	11464.9	656.2
KY	IFO 0565	0	0.0	40.2	54.7
	<i>Saccharomyces cerevisiae</i>	20	57.3	5071.6	333.5
KY	IFO 0210	0	0.0	119.4	89.6
	<i>Saccharomyces cerevisiae</i>	20	1698.7	4355.2	183.2
KY	IFO 0346	0	0.0	29.7	82.6
	<i>Schizosaccharomyces pombe</i>	20	83.1	4826.5	159.4
KY	IFO 1475	0	0.0	31.4	126.0
	<i>Ogataea polymorpha</i>	20	19.8	1196.1	402.7

TOP SECRET - 563295

(Continuation of Table 12)

KY	JCM 2169	0	0.0	67.2	54.3
	<i>Debaryomyces vanrijiae</i>	20	23.9	2807.0	492.6
	var <i>vanrijiae</i>				
KY	IFO 0339	0	0.0	41.6	114.7
	<i>Saccharomycodes ludwigii</i>	20	0.0	3217.2	199.4
KY	IFO 0115	0	0.0	25.2	76.6
	<i>Hanseniaspora valbyensis</i>	20	15.1	2823.5	185.8
	Valbyensis				
KY	IFO 0648	0	0.0	20.9	84.6
	<i>Kluuyveromyces lactis</i>	20	14.5	1128.6	225.8
KY	IFO 0005	0	0.0	34.9	51.7
	<i>Candida glabrata</i>	20	1193.0	4710.9	279.6
KY	IFO 0762	0	16.2	90.5	126.0
	<i>Candida solani</i>	20	231.3	962.5	350.0
KY	IFO 1527	0	7.8	16.0	0.0
	<i>Cryptococcus humicolus</i>	20	21.2	160.9	51.9
KY	IFO 1116	0	0.0	15.0	86.5
	<i>Wickerhamia fluorescens</i>	20	32.6	4262.8	500.7

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 20: 20 mg/L

Treated with phosphatase

43022695 - 1222082

Table 13

Medium composition: KB medium + 1% soybean oil + ergosterol

Strain No.	SQAD	Supernatant fraction ($\mu\text{g/L}$ of culture solution)			Cell fraction		
		NE	FOH	GGOH	NE	FOH	GGOH
IFO 3032	0	0.0	11.6	0.0	0.0	0.0	0.0
Bacillus	20	0.0	22.4	0.0	0.0	0.0	0.0
<u>Amyloliquefaciens</u>							
IFO 3030	0	0.0	21.9	0.0	0.0	0.0	0.0
Bacillus pumilus	20	0.0	36.6	0.0	0.0	6.0	0.0
IFO 3762	0	0.0	6.8	0.0	0.0	11.2	0.0
Staphylococcus	20	0.0	121.4	0.0	0.0	292.4	0.0
<u>Epidermidis</u>							
IFO 3067	0	0.0	5.1	0.0	0.0	0.0	0.0
Micrococcus	20	0.0	57.3	0.0	0.0	11.8	0.0
<u>Lutenus</u>							
IFO 12146	0	0.0	0.0	0.0	0.0	0.0	0.0
Exiguobacterium	20	0.0	115.7	0.0	0.0	10.4	0.0
<u>Acetyllicum</u>							

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 20: 20 mg/L

Treated with phosphatase

1002695 - 122001

Table 14

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	No.	Day 3			Day 10			Temp.	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Alcaligenes faecalis</i>	IFO13111	0.00	0.01	0.11	0.00	0.04	0.09	30	LBO-SSI
<i>Brevibacterium divisoratum</i>	NRRL2311	0.00	0.00	0.02	0.00	0.00	0.00	30	LBO-SSI
<i>Brevibacterium fuscum</i>	IFO12127	0.00	0.02	0.00	0.00	0.00	0.00	30	LBO-SSI
<i>Brevibacterium linens</i>	IFO12171	0.00	0.46	0.00	0.00	0.08	0.00	30	LBO-SSI
<i>Candida catenulata</i>	IFO 0720	0.04	8.10	0.34	0.04	8.61	0.47	30	YMO-SSI
<i>Candida fragicola</i>	IFO 1574	0.03	4.91	0.76	0.04	8.95	1.31	30	YMO-SSI
<i>Candida krusei</i>	IFO 0013	0.04	6.99	0.29	0.06	13.65	0.86	30	YMO-SSI
<i>Candida lambica</i>	IFO 1146	0.02	4.53	0.49	0.04	0.59	1.24	30	YMO-SSI
<i>Candida maltosa</i>	IFO 1977	0.00	6.74	0.19	0.08	9.03	0.58	30	YMO-SSI
<i>Candida mycoderma</i>	IFO 0164	0.02	5.45	0.20	0.03	4.69	0.17	30	YMO-SSI
<i>Candida parapsilosis</i>	IFO 0708	0.00	1.76	0.17	0.01	5.13	0.25	30	YMO-SSI
<i>Candida rugosa</i>	IFO 0591	0.00	0.90	0.08	0.00	4.20	0.19	30	YMO-SSI
<i>Candida succiphila</i>	IFO 1911	0.00	2.44	0.25	0.00	0.00	0.00	30	YMO-SSI
<i>Candida tropicalis</i>	IFO 0006	0.17			0.17	9.04	0.00	30	YMO-SSI
<i>Candida zeylanoides</i>	IFO 0719	0.00	1.43	0.29	0.00	7.38	1.24	30	YMO-SSI
<i>Cryptococcus albidus</i>	IFO 0881	0.00	0.15	0.03	0.02	2.41	0.45	30	YMO-SSI
<i>Cryptococcus glutinis</i>	IFO 1125	0.04	6.64	1.48	0.35	3.70	3.29	24	YMO-SSI
<i>Dipodascus ovetensis</i>	IFO 1201	0.00	4.23	0.14	0.04	8.68	0.95	30	YMO-SSI
<i>Haloferax volcanii</i>	IFO 14742	2.12	39.11	1.04	4.14	57.73	2.49	30	HVO-SSI
<i>Hanseniaspora valbyensis</i>	IFO 1758	0.00	0.33	0.04	0.04	2.40	0.12	30	YMO-SSI
<i>Issatchenkia orientalis</i>	IFO 1279	0.00	2.22	0.15	0.03	7.68	0.52	30	YMO-SSI
<i>Kloeckera africana</i>	IFO 0868	1.09	10.90	0.81	1.10	6.29	0.17	30	YMO-SSI
<i>Kloeckera apiculata</i>	IFO 0151	0.00	0.05	0.02	1.04	10.73	0.86	30	YMO-SSI
<i>Kluyveromyces marxianus</i>	IFO 0617	0.09	14.48	0.87	0.13	16.29	1.71	30	YMO-SSI
<i>Kuraishia capsulata</i>	IFO 0974	0.00	0.91	0.17	0.00	3.25	0.42	30	YMO-SSI
<i>Mortierella ramanriana</i>	ATCC 24786	0.00			0.76	0.13	24	YMO-SSI	
<i>Nakazawaea holstii</i>	IFO 0980	0.01	1.06	0.18	0.02	5.85	0.38	30	YMO-SSI
<i>Pichia capsulata</i>	IFO 0984	0.00	0.63	0.04	0.04	4.17	0.11	30	YMO-SSI
<i>Pichia henricii</i>	IFO 1477	0.00	3.20	0.12	0.00	3.24	0.00	30	YMO-SSI
<i>Pichia holstii</i>	IFO 0980	0.04	6.22	0.22	0.04	2.79	0.65	30	YMO-SSI
<i>Pichia naganishii</i>	IFO 1670	0.00	2.14	0.22	0.02	9.28	0.96	30	YMO-SSI
<i>Pichia rhodanensis</i>	IFO 1272	0.03	3.34	0.91	0.46	26.57	10.29	30	YMO-SSI
<i>Pichia saitoi</i>	IAM 4945	0.34	10.78	0.51	0.28	24.31	1.38	30	YMO-SSI
<i>Rhodosporidium toruloides</i>	IFO 8766	0.88	6.59	2.47	0.72	2.47	2.52	24	YMO-SSI
<i>Rhodotorula aurantinaca</i>	IFO 0951	0.01	3.14	0.18	0.03	6.11	0.50	30	YMO-SSI
<i>Rhodotorula rubra</i>	IFO 0870	0.03	1.62	1.02	0.16	2.32	1.61	30	YMO-SSI
<i>Saccharomyopsis fibuligera</i>	IFO 0105	0.00	0.06	1.68	0.00	5.71	4.79	30	YMO-SSI
<i>Saccharomyopsis lipolytica</i>	IFO 1209	0.05	9.48	0.16	0.21	16.46	0.83	30	YMO-SSI
<i>Schizosaccharomyces octosporus</i>	IAM4842	0.00	1.24	0.03	0.00	1.79	0.08	30	YMO-SSI
<i>Staphylococcus aureus</i>	IFO3060	0.00	0.06	0.00	0.00	0.05	0.00	30	YMO-SSI
<i>Torulaspora delbrueckii</i>	IFO 1626	0.04	2.33	0.15	0.06	5.50	0.36	30	YMO-SSI
<i>Trichosporon cutaneum</i>	IFO 1198	0.00	10.23	0.69	0.00	0.14	0.09	30	YMO-SSI
<i>Tsukamurella paurometabolum</i>	IFO12160	0.00	0.07	0.00	0.00	0.06	0.00	30	YMO-SSI
<i>Yamadazyma farinosa</i>	IFO 0193	0.00	1.27	0.18	0.00	2.36	0.82	30	YMO-SSI
<i>Yerroiwia lipolytica</i>	IFO 0746	0.06	9.66	0.15	0.16	13.41	0.36	24	YMO-SSI
<i>Zygosaccharomyces japonicus</i>	IFO 0595	0.05	0.77	0.05	0.10	2.17	0.15	30	YMO-SSI

1802696 - 202001

Table 14 (continued)

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	IFO No.	Day 3			Day 10			Temp. (°C)	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Ambrosiozyma ambrosiae</i>	10835	0.0	0.1	1.5	0.0	0.0	0.7	24	YPDO-SSI
<i>Ambrosiozyma monospora</i>	10751	0.0	1.0	0.3	0.0	4.8	1.4	24	YMO-SSI
<i>Ambrosiozyma philentoma</i>	1847	0.0	0.9	0.2	0.0	16.8	0.8	24	YMO-SSI
<i>Ambrosiozyma platypodis</i>	10752	0.0	1.7	0.1	0.0	48.6	1.4	24	YMO-SSI
<i>Bensingtonia intermedia</i>	10178	0.0	1.5	0.7	0.0	2.9	5.2	24	YMO-SSI
<i>Botryozyma nematodophila</i>	10830	0.0	2.5	0.3	0.0	5.6	2.8	24	YPDO-SSI
<i>Brettanomyces anomalus</i>	0627	0.0	18.0	0.4	0.6	16.7	0.0	24	YMO-SSI
<i>Brettanomyces bruxellensis</i>	0797	0.0	4.7	0.5	0.0	8.2	0.0	24	YMO-SSI
<i>Brettanomyces custersianus</i>	10735	0.0	0.1	1.4	0.0	20.0	0.6	24	YMO-SSI
<i>Bullera crocea</i>	10113	0.0	7.4	0.5	0.0	16.1	0.5	17	YMO-SSI
<i>Bullera sinensis</i>	10756	0.1	0.3	1.0	0.1	1.7	2.3	24	YMO-SSI
<i>Citeromyces matritensis</i>	0651	0.1	2.0	0.4	0.0	0.7	0.0	24	YMO-SSI
<i>Clavispora lusitaniae</i>	10059	0.0	1.0	0.3	0.1	9.2	9.1	24	YMO-SSI
<i>Cystofilobasidium infirmominiatum</i>	1057	5.7	14.9	2.6	10.8	48.4	3.6	24	YMO-SSI
<i>Debaryomyces occidentalis</i>	1842	0.0	0.7	0.2	0.0	0.4	4.1	24	YMO-SSI
<i>Dekkera bruxellensis</i>	1590	0.0	3.7	0.2	0.0	15.7	0.0	24	YMO-SSI
<i>Dipodascus armillariae</i>	10804	0.0	4.2	0.1	0.0	3.3	0.2	24	YMO-SSI
<i>Dipodascus tetrasperma</i>	10810	0.0	1.7	0.8	0.0	9.8	2.5	24	YMO-SSI
<i>Eremascus albus</i>	10811	0.0	0.0	4.8	0.0	0.0	3.6	24	YMO-SSI
<i>Eremascus fertilis</i>	0691	0.0	0.0	0.0	0.0	0.4	0.0	24	YMO-SSI
<i>Eremothecium gossypii</i>	1355	0.0	0.8	0.0	0.0	4.4	0.9	24	YMO-SSI
<i>Erythrobasidium hasegawianum</i>	1058	0.0	0.5	1.0	0.0	0.0	6.8	24	YMO-SSI
<i>Hanseniaspora guilliermondii</i>	1411	0.0	1.4	0.1	0.0	1.3	0.0	24	YMO-SSI
<i>Hanseniaspora uvarum</i>	10833	0.1	15.3	2.9	0.4	11.1	0.8	24	YPDO-SSI
<i>Kloeckeraspora vineae</i>	1415	0.4	3.4	0.3	0.7	1.2	0.0	24	YMO-SSI
<i>Kockovaella imperatae</i>	10522	0.0	3.2	3.5	0.0	19.5	6.2	24	YMO-SSI
<i>Kodamaea ohmeri</i>	0202	0.0	7.7	1.6	0.1	13.7	4.7	24	YMO-SSI
<i>Kurtzmanomyces nectairei</i>	10118	0.0	0.1	0.1	0.0	0.0	0.0	24	YMO-SSI
<i>Leucosporidium scottii</i>	1924	0.2	32.8	1.3	0.7	5.2	0.0	24	YMO-SSI
<i>Lodderomyces elongisporus</i>	1676	0.1	14.8	2.0	0.1	15.7	0.0	24	YMO-SSI
<i>Malassezia furfur</i>	0656	0.0	4.3	0.1	0.0	6.9	0.1	30	YMOO-SSI
<i>Metschnikowia hawaiiensis</i>	10791	0.0	0.0	0.3	0.0	0.0	0.2	24	YPDO-SSI
<i>Metschnikowia krispii</i>	1677	0.0	1.3	0.1	0.0	21.0	0.0	24	YMO-SSI
<i>Metschnikowia lunata</i>	1605	0.0	5.1	1.0	0.3	31.9	5.9	24	YMO-SSI
<i>Metschnikowia pulcherrima</i>	0863	0.0	10.5	0.2	0.1	15.4	0.3	24	YMO-SSI
<i>Mrakia frigida</i>	1926	0.5	25.3	0.3	0.3	11.3	0.1	12	YMO-SSI

Table 14 (continu d)

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	IFO No.	Day 3			Day 10			Temp. (°C)	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Myxozyma lipomycoïdes</i>	10351	0.7	23.3	5.4	1.3	35	1.1	24	YMO-SSI
<i>Nadsonia commutata</i>	10029	0.0	0.1	0.0	0.0	0.3	0.0	17	YMO-SSI
<i>Pachysolen tannophilus</i>	1007	0.0	0.1	0.1	0.0	1.9	1.4	24	YMO-SSI
<i>Pichia burtonii</i>	10837	0.0	3.0	1.1	0.0	7.5	1.7	24	YMO-SSI
<i>Pichia misumaiensis</i>	10221	0.3	20.8	1.8	1.0	14.5	2.0	24	YMO-SSI
<i>Pichia ofunaensis</i>	10709	0.0	0.1	0.1	0.0	0.0	0.0	24	YMO-SSI
<i>Pichia pijperi</i>	1290	0.5	5.1	0.6	0.5	6.4	0.5	24	YMO-SSI
<i>Saccharomyces transvaalensis</i>	1625	0.1	0.0	0.0	0.0	0.0	0.0	30	YMO-SSI
<i>Saccharomyces sinensis</i>	10111	0.1	0.4	0.0	0.6	0.8	0.1	30	YMO-SSI
<i>Saccharomyces fibuligera</i>	10829	0.0	0.0	4.1	0.0	0.0	2.8	24	YPDO-SSI
<i>Saccharomyces javaensis</i>	1848	0.0	0.0	0.0	0.0	0.0	0.6	24	YMO-SSI
<i>Saccharomyces schoenii</i>	10683	0.1	5.3	0.4	0.5	28.3	2.3	24	YMO-SSI
<i>Saccharomyces synnaedendra</i>	1604	0.0	2.8	1.3	0.0	1.2	0.0	24	YMO-SSI
<i>Saccharomyces vini</i>	1748	0.0	3.9	0.4	0.0	23.2	6.4	24	YMO-SSI
<i>Saturnispora zaruensis</i>	1384	0.0	0.2	0.1	0.0	3.0	1.3	24	YMO-SSI
<i>Schizoblastosporion kobayasi</i>	1644	0.0	4.0	0.9	0.0	2.8	4.7	24	YMO-SSI
<i>Schizoblastosporion starkeyi-henrici</i>	10842	0.0	0.9	0.2	0.0	1.1	0.8	24	YPDO-SSI
<i>Sporopachydermia cereana</i>	10013	0.0	0.6	0.2	0.2	0.1	1.2	24	YMO-SSI
<i>Stephanoascus ciferrii</i>	1854	0.0	0.9	0.1	0.0	3.3	0.0	24	YMO-SSI
<i>Sterigmatomyces elviae</i>	1843	0.0	4.5	0.5	0.1	10.5	1.8	24	YMO-SSI
<i>Sterigmatomyces halophilus</i>	1488	0.0	0.0	0.0	0.8	0.3	0.0	24	YMO-SSI
<i>Sterigmatosporidium polymorphum</i>	10121	0.0	2.4	0.1	0.0	15.7	1.3	24	YMO-SSI
<i>Sympodiomyces parvus</i>	10132	0.0	3.7	0.1	0.0	3.0	0.0	17	YMO-SSI
<i>Sympodiomyces paphiopedilii</i>	10750	0.0	1.3	1.0	0.0	0.8	1.0	24	YMO-SSI
<i>Trichosporon brassicae</i>	1584	0.0	13.0	0.7	0.0	13.2	0.0	24	YMO-SSI
<i>Trichosporon pullulans</i>	1232	0.2	10.9	0.2	0.3	30.5	1.1	17	YMO-SSI
<i>Trigonopsis variabilis</i>	0755	0.0	0.0	0.0	0.0	0.1	0.2	24	YMO-SSI
<i>Tsuchiyaea wingfieldii</i>	10204	0.0	15.3	0.7	0.0	17.5	1.4	24	YMO-SSI
<i>Wickerhamilla domercqiae</i>	1857	0.0	1.7	0.0	0.0	5.2	0.0	24	YMO-SSI
<i>Xanthophyllomyces dendrorhous</i>	10130	0.1	30.0	0.8	0.5	33.8	2.8	24	YMO-SSI
<i>Zygozyma oligophaga</i>	10360	0.1	6.4	5.3	0.8	24.3	5.6	24	YMO-SSI

Table 14 (continued)

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	No.	Day 3			Day 9			Temp. (°C)	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Aciculaconidium aculeatum</i>	IFO 10124	0.0	21.3	1.4	0.0	26.4	2.3	24	YMO-SSI
<i>Bullera pseudoalba</i>	IFO 10179	0.0	11.0	2.0	0.0	40.7	15.0	24	YMO-SSI
<i>Candida albicans</i>	IFO 1060	0.2	108.8	3.5	0.8	32.9	4.7	30	YMO-SSI
<i>Candida glabrata</i>	IFO 0741	0.3	19.6	0.6	3.2	70.1	4.2	30	YMO-SSI
<i>Candida guilliermondii</i>	IFO 0566	0.0	3.9	0.8	0.0	4.2	1.1	30	YMO-SSI
<i>Candida intermedia</i>	IFO 0761	0.0	56.2	2.5	0.1	87.0	6.2	30	YMO-SSI
<i>Candida kefyr</i>	IFO 0706	0.3	28.2	2.0	0.7	15.8	2.9	30	YMO-SSI
<i>Candida krusei</i>	IFO 0941	0.5	37.9	4.0	3.7	7.8	8.0	30	YMO-SSI
<i>Candida tenuis</i>	IFO 0716	0.0	2.2	0.2	0.0	31.2	2.2	30	YMO-SSI
<i>Candida utilis</i>	IFO 0619	0.2	42.2	5.5	0.8	52.5	11.1	30	YMO-SSI
<i>Cryptococcus humicola</i>	IFO 0753	0.2	6.3	2.0	0.0	0.3	3.3	30	YMO-SSI
<i>Cryptococcus terreus</i>	IFO 0727	0.0	1.2	0.1	0.2	1.9	0.3	30	YMO-SSI
<i>Debaryomyces castellii</i>	IFO 1359	0.0	11.4	1.1	0.0	26.8	4.6	30	YMO-SSI
<i>Fellowmyces pericillatus</i>	IFO 10119	0.0	2.9	0.3	0.1	45.7	4.4	24	YMO-SSI
<i>Filobasidium capsuligenum</i>	IFO 1185	0.0	51.0	1.1	0.2	106.6	3.6	24	YMO-SSI
<i>Filobasidium uniguttulatum</i>	IFO 0699	0.0	28.7	1.3	0.4	85.4	8.9	24	YMO-SSI
<i>Kloeckera corticis</i>	IFO 0633	0.4	42.8	2.3	1.2	62.1	8.2	30	YMO-SSI
<i>Holtermannia corniformis</i>	IFO 10742	0.0	25.4	2.8	1.1	50.7	8.4	24	YMO-SSI
<i>Kluyveromyces marxianus</i>	IFO 0617	0.0	16.6	0.8	0.4	35.1	5.0	30	YMO-SSI
<i>Phaffia rhodozyma</i>	ATCC 66270	0.0	2.2	0.1	0.5	108.7	5.8	24	YMO-SSI
<i>Pichia anomala</i>	IFO 0146	0.2	34.8	2.6	0.2	7.4	4.3	30	YMO-SSI
<i>Pichia fabianii</i>	IFO 1254	0.0	14.3	1.5	0.2	0.1	4.2	30	YMO-SSI
<i>Pichia farinosa</i>	IFO 1003	0.0	3.2	0.6	0.0	11.1	1.8	30	YMO-SSI
<i>Pichia jadinii</i>	IFO 0987	0.0	23.1	2.0	0.1	24.6	8.3	30	YMO-SSI
<i>Pichia polymorpha</i>	IFO 0195	0.3	21.8	3.2	0.4	0.6	5.2	30	YMO-SSI
<i>Pichia silvicola</i>	IFO 0807	0.2	10.6	1.6	0.8	29.0	4.2	30	YMO-SSI
<i>Rhodotorula glutinis</i>	IFO 0695	0.0	3.8	0.2	0.0	3.4	0.3	30	YMO-SSI
<i>Rhodotorula minuta</i>	IFO 0715	0.3	6.6	12.0	3.4	5.0	0.7	30	YMO-SSI
<i>Rhodotorula rubra</i>	IFO 0870	0.3	5.5	10.8	3.5	4.4	26.4	30	YMO-SSI
<i>Saccharomyces cerevisiae</i>	IFO 0258	0.0	22.3	0.6	0.4	77.5	1.9	30	YMO-SSI
<i>Saccharomyces cerevisiae</i>	IFO 2347	0.0	18.8	0.7	0.1	36.5	1.4	30	YMO-SSI
<i>Saccharomyces ludwigii</i>	IFO 10036	0.0	3.3	0.2	0.1	15.5	0.4	24	YMO-SSI
<i>Saccharomyces fermentans</i>	IFO 10772	0.1	41.4	1.9	0.3	37.9	3.1	24	YMO-SSI
<i>Sporidiobolus samonicolar</i>	IFO 1035	0.1	7.9	1.1	0.1	42.3	6.4	30	YMO-SSI
<i>Sporabolomyces salmonicolor</i>	IFO 0374	0.1	28.8	3.4	0.5	35.7	14.4	30	YMO-SSI
<i>Trichosporiella flavificans</i>	IFO 1573	0.0	0.0	0.0	0.2	31.5	3.0	24	YMO-SSI
<i>Trichosporon penicillatum</i>	JCM 2171	0.0	1.7	0.6	0.1	1.7	0.0	30	YMO-SSI
<i>Williopsis californica</i>	IFO 0800	10.1	95.7	4.7	10.5	90.1	5.2	24	YMO-SSI
<i>Williopsis saturnus</i>	IFO 0895	0.5	59.1	9.0	1.6	69.2	13.1	30	YMO-SSI
<i>Yamadazyma farinosa</i>	IFO 0459	0.0	6.2	0.8	0.0	20.8	2.2	30	YMO-SSI
<i>Zygoascus hellenicus</i>	IFO 10184	0.0	3.9	0.1	0.0	32.4	2.7	24	YMO-SSI